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## THE SCIENTIFIC BASIS OF BELIEF.

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MAN is a soul imprisoned and residing in mechanism, a spirit, the image of God, brought to earth, and with all potentialities embodied. His mechanism is distinguished from those of lower orders simply by the greater perfection of the organism in which his existence is passed in the seen universe; his spirit from the higher orders of intelligences and existences by the fact that he is only able to attain the ends for which he is imprisoned, for a time, on this earth, through the operation of physical He advances by the aid of physical forces and of chemical changes which his enclosing apparatus and machinery are especially fitted to produce, or to take advantage of, in the intricate series of operations which he, automatically or by choice. performs as his work in this world. His visible representative is a marvellous machine; but it is a machine simply. He himself is of the invisible.

This man comes out of the unseen universe, spends a short life in the seen, and returns as mysteriously to the unseen when his work is done and his mortal life ends. He is a composite of soul, intellect, and accidental physical accessories. While we often meet with ill-defined and uncertain evidences that he has other means and methods of cognition of the universes, both seen and unseen, it is invariably the fact that his soul, his intellect, and his physical senses are so intimately related that he gains substantially all his knowledge, of the seen at least, through the aid of the senses alone; he gains, we think and hope, some slight acquaintance with the unseen through the workings of the mind.

When Paulinus was endeavoring to convert the English king, it is said by the historian that no thought was so effective in

shaking the king's faith in his heathen gods as that of the old priest: "So seems the life of man, O king! as a sparrow's flight through the hall, when you are sitting at meat in winter-tide, with the warm fire lighted on the hearth, but the icy rain-storm The sparrow flies in at one door, and tarries for a moment in the light and heat; then, flying forth from the other, vanishes into the wintry darkness whence it came: so tarries in our sight for a moment the life of man; but what is before it and what after it we know not." But modern science has, in the midst of its strivings for more tangible and immediately appreciable results, given us some light in this direction; and we are able to see farther into the hitherto unseen and invisible than in the days of the old Saxons, and vastly farther and more clearly than in the times of the prophets of Israel. Science is beginning to see a probability, at least, that the seen is the issue of the unseen; that all life, all characteristics of the living, all the material, the vital, the spiritual of humanity, not only have come out of the unseen, but that they have brought to us all that exists in the unseen, in such varying proportions as humanity, in its imperfect completeness, is capable of accepting; that life, like matter and all other existences, is actually immortal.

Man is composed of all the elements, and in his self, as in his body, in his intangible, as in his tangible, composition, he comprehends a part of every element of the unseen. As in his body we may, by refined chemical analysis, find in muscle, blood, and bones not only oxygen, hydrogen, nitrogen, lime, and phosphorus, but traces of iron and of gold; as earth, air, and water, and all their constituents, and the finest elements of the stars are there; so, we are beginning to believe, are soul and intellect and spiritual part all representative, in composition, of the highest heavens, the deepest hells, and the nearest, as the farthest, souls, intellects, spirits.

Man being thus a part of every universe, seen or unseen, sensible or unfelt, consciously or unconsciously related, it is certain that he must seek knowledge in each realm through his appropriate part. Physical science gives him knowledge of the material, its substance, laws, forces, and energies; intellect brings, him into touch with the intellectual; spiritual senses convey to him the intuitions, not the less true and exact, if rightly apprehended, than science itself—the intuitions of morality and the

fundamental elements of religious and soul life. Each may, perhaps, be expected to aid the other in their common or approximate fields; but the truest thoughts must come from the truest and most appropriate source. Science cannot teach religion; creeds can give no aid to science in its formulations of physical law; intellectual attainments cannot substitute themselves for the moralities. We must always, we may presume, study nature through miscroscope, telescope, test-tube, and spectroscope; sound logic must always formulate our philosophies; we must learn to know God through the spiritual powers, no less existent, if less readily perceived and characterized in language, than other human attributes.

The spiritual is as essential to a complete human character as is the intellectual, or the simply moral, or the physical part itself. The unsymmetrical individual may lack this element, just as he may be otherwise defective; but it is essential to perfection. On the other hand, it may, I think, undoubtedly exist in excess, and in defect, of other qualities. Blind Tom exhibited a marvellous talent, within a limited sphere, for music, though deficient in intellect; and I can readily conceive a person, or a race, rude and untutored, even in a degree barbarous, but endowed, like God's children in Old-Testament days, with superior religious faculties. Out of the spiritual, we must admit, must come our intuitions, our religious faith. The faculty that we here recognize not only gives power of recognition of religious truths and holds us closer to God, but it is that, also, which gives origin to a necessity in the soul of humanity for settled religious belief. And this necessity is as intense in its manifestation, and as imperative in its compulsion, as any other of the characteristics that sustain the life of the race. It compels all men, all races of men, all ages of humanity and of every race, to seek a formal theory and settled creeds. It is thus that man has been seeking, as a vital element of life, from the first to the latest days, a religion and a creed. And by a creed he usually means a code of absolute truth. What that code shall prove to be he cares not, nor has he a right to care: but he does and must desire that it shall be a firm foundation for his ethical and devotional life.

As in the field of natural science and in all physical investigation, our books contain the past, our instruments and apparatus contain the future, so, in the higher researches of the philosopher

and the moralist, the books must be searched for the few stray, widely-scattered truths acquired to the time; while in the future lies much still to be gained by man through patient endeavor and the use of men as his instruments, mind as his active agent. In this work nothing can be expected from those "obstinate theorists," as Arago calls them, "who, without being struck by the thousands of instances to the contrary, do yet refuse qualities of the heart to every man whose intellect has been fostered by the fertile and sublime and imperishable truths of the exact sciences." But scientific men must do their part, and their work must be accepted as, so far as it goes, the most stable of all fruits of our study of God's universe and its various worlds, whether tangible or intangible, material, moral, or intellectual. Honesty, fairness, kindness, and good-fellowship must distinguish the attitude of every one who would be successful in such great work.

As Emerson says, "the man of genius must occupy the whole space between God, pure mind, and the multitude of uneducated men. He must draw from the infinite reason on one side; and he must penetrate into the heart and sense of the crowd on the other"; then, with Plato, considering the soul to be immortal, he will "always persevere in the road which leads upward," and, after death, "possess, in the other world, a destiny suited to the life so led in this."

Professors Stewart and Tait, in that remarkable work, "The Unseen Universe," secure what they regard as a "criterion of truth" in the proposition that "God will never permanently put the human race to intellectual confusion." They therefore believe that any real moral or philosophic truth will be recognized by mankind as such; that moral principles, universally recognized as such by the human race, must be accepted as absolute; and that, in proportion as an ethical proposition is generally acknowledged by the most intelligent, its truth may be considered as established. Now, while we may not be able to assert that this foundation principle may be considered as itself absolutely established,—for in the field of morals and the intuitions the whole system of logic and deduction must be based on admitted axioms, incapable of proof,—I think we may at least accept the proposition of Thomson and Tait as the best guide available, out side "revelation," even though it be not itself revelation, as all moral truths are, in a sense.

Let us, for the moment at least, take this principle as our starting-point, and, looking over the religions and the theologies of the past and of the present, endeavor to select from among their many and diverse beliefs those which are the most essential and most unquestionable. In this search for truth we need hardly attempt to follow the course of the great English philosopher whose adventures are described by Bernardin de Saint Pierre, finding truth, at last, in "La Chaumière Indienne"; though we might not unreasonably expect in some sense to repeat his experiment, and, were we to do so, to find little aid among the great philosophers and learned divines; coming nearest to the divinity of Truth, at last even touching the hem of her garments, amid the wilds of the forest and in the humblest dwellings of the earth, among the outcasts and the pariahs, exiled from society, living only with God, and preserving, as the soul cannot amid the rush of the world and its distractions, instincts of right and wrong, always most sure and strong in the bosom of the child and of the childlike.

Truths recognized by the simple and the childlike; those accepted by great masses of people nearest nature, the source; and principles universally admitted by those who are disposed to do right and to kindliness and hospitality—these are most certainly truths and farthest beyond dispute. What pariah and Brahmin alike accept, what Hindoo and European, Cossack and Mexican, equally recognize, may be taken as God's truth, if consonant with the doctrines of the Christ.

But Christ had no formulated creed; his were no rigid statements of the moral law through contrived and circumscribed assertions of limited application. He simply lived a divine life, talked the doctrine of universal love, gave all for love, and died. We may be sure that we need not attempt more than he did. Should we take his ways and follow them faithfully to their end, with no more explicit statement of our belief and doctrine than he gave us, we may be sure we have done all that is required of us.

In the search for truth, the inquirer must necessarily adopt a scientific spirit; and by this I mean he must look for the real, the actual fact, regardless of his prejudices, his earlier prejudgments, his existent belief, or his anticipations, and absolutely unconcerned as to its bearings and its consequences. God's truths can be trusted to stand, and to stand as a whole, each sustaining

every other; and no man need fear that any fact of science, of the seen universe, will contradict or embarrass any other; that any two moral principles will ever conflict; that any ethical logic will lack syllogistic certainty; or that the truths of any one universe will fail to accord with, far less will contradict, any truth in any other of the realms of the Almighty. Every worker helps every other in every field; all are needed to secure true knowledge and correct appreciation of the All; no final creed can be reached, accordant with God's trinity, except by the concurrence of workers in every department of the triune. But every laborer in this great field must sacrifice everything to truth. Science supplies facts; but facts of little importance to the seeker after moral truths, except as illustrating the consistencies of God's laws It gives us methods that are of real value as leading and wavs. us into the habit of taking knowledge as we may, in half-truths, in incomplete systems, in uncertain nebulous lights, only provisionally; always standing ready to sacrifice belief or formulated creed to later revelation; adhering, above all and before everything else, to the latest and fullest truth; taking the nearest right, whatever its form, whatever its consequences, as entitled to all the respect of a revelation.

Scientific truths can never conflict with moral or religious truths. There can be no conflict between science and religion; though there has often been discordance between scientific men and theologians.

We all remember that, when the Argonauts visited the Centaur sage, after Cheiron had welcomed and had feasted them, he sang to them his wondrous song of the battles between the Centaurs and the Lapithai, and their glorious but sad ending:—

"Then Orpheus took the lyre and sang of Chaos, and of the making of this marvellous World, and how all things sprang from Love, who could not live alone in the Abyss. And, as he sang, his voice rose from the cave, above the crags, and through the treetops, and the glens of oak and pine. And the trees bowed their heads when they heard it, and the gray rocks cracked and rang, and the forest beasts crept near to listen, and the birds forsook their nests and hovered round," and all creation gloried and rejoiced in the magic song.

Full many a child has listened in wonder and has absorbed inspiration from Kingsley's magic stories of the old, the wise

fables of Greek mythology; but what wisest man may not find in this incident, so beautifully told by the old Hellenic troubadours, and translated by that loveliest of modern repétiteurs, the simile of grander spiritual events, and an inspiration that, had we Orpheus's heavenly power, should give rise to songs "like voices of angels in Paradise"? I imagine that in our creed, once framed of the scantlings of the creeds of the world and of all the ages, we should find that its study would teach us again "how all things sprang from love" and that "love cannot live alone in the abyss" of this world. In this study we follow Tennyson:—

"Self-reverence, self-knowledge, self-control:
These three alone lead life to sovereign power,
Yet not for power (power, of herself,
Would come uncalled for), but to live by law;
Acting the law we live by without fear."

The path only is shown us by our creed; the soul that would follow that path must enter upon it with the right spirit, and pursue it steadily and unhesitatingly, holding the law in reverence; taking its course as the mariner on a long voyage steers by the polestar or the unerring magnetic needle. The guiding-star must be above, and away ahead of us, too, or we shall find ourselves soon far astray. It is this which makes it evident that in olden times, when speculation took the place of research; when fancy, rather than fact, was taken as the guide; when the uncertain meandering of a will-o'-the-wisp, instead of the unchanging polestar, was followed, creeds and lives must have deviated widely from the true course. Had science done nothing more for mankind, its final reconstruction of all our methods of philosophy might be taken as one of the greatest boons ever conferred upon the race.

Absolute independence of belief, and in its expression, is one of the essential elements of progress in religion as in science. I would force my own views upon no one; but I would claim equal privilege in forming my own creeds without interference from others. Others may think as they choose about the inspiration of the Scriptures; but I claim the privilege of concluding that the writer of the decalogue, whether receiving it directly from the Almighty amid the flashing of heavenly flame and the thunders of his voice, in dream, or in the visions of a day—I claim that this

Moses was inspired with the very self of the God that I would demand the right to worship. Let others discuss the question of the humanity or the divinity of Christ as they will. For me there exists the right to follow the dictates of my own reason and feeling, and to assert the conviction that his was a soul essentially divine. Despite the horrors of the old Hebraic theology, it contains much that is, to me, and judged by my standards, unquestionable inspiration; but how conveyed and how received I would not pretend to say.

I claim the right to do my own thinking so far as to be permitted to believe that inspiration has visited many a good soul in earlier days; that the human race has never been without the inspiring voice of conscience and the spoken voice of righteous men. I am sure Krishna has always lived, has always had a divine side to his nature; and Radha has always stood by, with her divine thought, ready to answer his prayer. Independence of thought has formed many creeds; but all on some basis of admitted truth.

Induction only can give certainty; though it means slow progress. Its operation, however, has resulted in producing very different attitudes in different classes of minds. This process of acquirement of knowledge, practised by one who can only see the physical side of science, leads to the acceptance of agnosticism; all that is unseen is unfelt, unknown, and unknowable. To those who add to scientific attainments some imagination, who, while seeing the drift of the stars, also hear the music of the spheres, the universe seems to constitute its own deity, creation is its own creator, and pantheism is a satisfying religion, as it was to the earliest Indian philosophers. To those logical minds so constituted as necessarily to recognize a plan and a purpose, the theological view seems to point with certainty to an intellectual first cause, a being in whom omnipotence, omniscience, and omnipresence, intelligent foresight, and a vast and eternal programme combine to give the infinite creative and preserving and guiding soul all the qualities of a purely intellectual Goda God without sympathies or feelings or compassion or This is abstract deism. But to those who recognize moral, as well as mental and intellectual and physical, existence and movements; who feel as well as see; who are aware of an inner life and an inner consciousness; who possess that element, essential to all religious life, which we call faith, -meaning knowledge of moral principles and of all affections coming of instruction through channels never recognized or recognizable through any of the processes of physical science,—the anthropomorphic idea of God is confirmed and attains certainty; and the complete and symmetrical human soul, with its knowledge coming of scientific research, its faith coming of heaven-implanted intuitions and consciousness, and its reasoning power basing all conclusions on all knowledge,—the anthropomorphic deist,—believes in a personal God who is the ideal and the impersonation of all that the best of men strive toward and hope to approximate, however feebly—infinity of goodness, infinity of love, infinity of charity, all moral excellence, as well as illimitable knowledge and infinite power.

The agnostic learns nothing except what science can teach him; and his highest thought goes not beyond the mechanism of this organized mass of force-endowed matter, which, only, he can perceive or conceive. The theist "recognizes an omnipresent energy which is none other than the living God," "the infinite and eternal energy from which all things proceed," as Mr. Spencer puts it, of which "our lives, alike physical and mental, in common with all the activities, organic and inorganic, amid which we live, are but the workings." The highest conceptions of a Deity are now arising from the study of the development of the universe from primeval chaos; infinity of expanse enclosing infinitude of germs of all life, of all physical, intellectual, and moral growths, according to a definite plan, and through the operation of law proceeding in an orderly and intelligent scheme toward the perfecting of an unknowable culmination in every realm of physical, intellectual, and moral nature.

With Fiske, "I believe it has been fully shown that, so far from degrading Humanity, or putting it on a level with the animal world in general, the doctrine of evolution shows us distinctly for the first time how the creation and the perfecting of Man is the goal toward which Nature's work has been tending from the first. We can now see clearly that our new knowledge enlarges ten-fold the significance of life, and makes it seem more than ever the chief object of Divine care, the consummate fruition of that creative energy which is manifested throughout the knowable universe. . . . He who regards Man as the consummate fruition of creative energy, and the chief object of Divine care, is almost

irresistibly driven to the belief that the soul's career is not completed with the present life upon the earth."

In that beautiful pagan, yet Christian, poem, so much bepraised, so much abused, "The Light of Asia," Edwin Arnold, in his inimitable rhythm, thus paraphrases the Buddhist's rendering of the teachings of Gautama as to the right way, the "eightfold path which brings to peace":

- "The First good Level is Right Doctrine. Walk In fear of Dharma, shunning all offence; In heed of Karma, which doth make man's fate; In lordship over sense.
- "The Second is Right Purpose. Have good-will
  To all that lives, letting unkindness die
  And greed and wrath; so that your lives be made
  Like soft airs passing by.
- "The Third is Right Discourse. Govern the lips
  As they were palace doors, the King within;
  Tranquil and fair and courteous be all words
  Which from that presence win.
- "The Fourth is Right Behavior. Let each act
  Assoil a fault or help a merit grow;
  Like threads of silver seen through crystal beads
  Let love through good deeds show.
- "Four higher roadways be. Only those feet
  May tread them which have done with earthly things;
  Right Purity; Right Thought; Right Loneliness;
  Right Rapture. Spread no wings
- "For sunward flight, thou soul with unplumed vans! Sweet is the lower air and safe, and known The homely levels: only strong ones leave The nest each makes his own.
- "Enter the path! There spring the healing streams
  Quenching all thirst! There bloom th' immortal flowers,
  Carpeting all the way with joy! There throng
  Swiftest and sweetest hours!"

And so "all who love the Master for his love of us" are taught by this untaught, yet wisest, of pagans to endeavor,

> "Living pure, reverent, patient, pitiful, Loving all things which live even as themselves,"

to pursue the right path toward the right. Thus, nearly five hundred years before the Christian era, a Christ-like pagan para-

phrased the Sermon on the Mount. Why may not we, two thousand years later, with all the teachings of the greater leader before us, with all the accumulated intelligence and moral growth of the intervening period at our command, introduce into our paths and our theories of life and work, and of preparation for life and its work, the perfect principle of the Golden Rule, and all those grand corollaries that have been found to follow, by every earnest disciple of the right, from Gautama and the Christ to our own time? It is such adoption of right principles as has accompanied modern changes and advances in moral and intellectual education that has given us so much progress as we have witnessed in the history of the last century. It is the influence of such elements in our future work that we may trust to give to us all that we are to gain, in the future, for ourselves and for our children, for our fellows, for the nation, and for the world.

We can easily see how it happens that Buddhism survives. Its adherents can grasp, through its teachings, some of the loveliest principles; perceive some of the grandest moral truths; realize something of the truest Christian feeling, simple though such believers are; and thus they gain an experience of the best side of life, even in the midst of their ignorance. Faith, at least, is with them. What Bishop Carpenter calls the essentials of religion, its "permanent elements," dependence, fellowship, progress in moral life, are theirs; but, most of all, Buddha commends to them that quality which our martyred President illustrated with his "malice toward none, with charity for all"—all-comprehending love.

Our modern Plato has said: "There will be a new church founded on moral science; at first cold and naked, a babe in a manger again, the algebra and mathematics of ethical law, the church of men to come, without shawms, or psaltery, or sackbut; but it will have heaven and earth for its beams and rafters; science for symbol and illustration; it will fast enough gather beauty, music, picture, poetry. . . . The nameless Thought, the nameless Power, the super-personal Heart,"—"it shall repose alone on that."

"Our little systems have their day;
They have their day and cease to be:
They are but broken lights of thee,
And Thou, O Lord, art more than they."

Over all, enclosing all, beyond all, and all in all, is love: nobler, diviner, grander than noblest intellect, than grandest beauty of form, than divinest thought. Well may we sing:

"Strong Son of God, immortal love,
Whom we, that have not seen thy face,
By faith, and faith alone, embrace,
Believing where we cannot prove."

Well may we content ourselves with a creed composed, as to its moral logic, of the Mosaic original; as to its emotional side, of the Sermon on the Mount; its whole, the "new commandment," "that ye love one another"! Such a creed satisfies the reason and conscience through the decalogue, the spirit through Christ, the whole soul through love; while the Lord's prayer expresses every essential aspiration.

Christ crucified is the incarnation and the apotheosis of God's charity—"the dewdrop lost in the shining sea" of infinite love. While faith gives us firm hold on all that the soul prizes, what more do we need? what more should we desire? why vex ourselves with minor and perhaps unsolvable questions? And for the one promise—"Blessed are the pure in heart, for they shall see God." That is all; that is enough!

How much of this essential creed is comprehended in that beautiful verse of Lowell!—

"All round about our feet shall shine
A light like that the wise men saw,
If we our loving wills incline
To that sweet life which is the Law."

ROBERT H. THURSTON.